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3. (Once Amended) The method according to claim 2, wherein determining if the target device has an active neighbor comprises:

identifying a neighbor of the target device;
attempting to communicate with the identified neighbor of the target device; and
if the attempt to communicate with the identified neighbor is successful, concluding that the identified neighbor is active.

4. (Once Amended) The method according to claim 2, further comprising locating a neighbor of the target device.

5. (Once Amended) The method according to claim 4, wherein the locating comprises:
generating a neighbor table for the network; and
consulting the neighbor table to locate the neighbor of the target device.

6. (Once Amended) The method according to claim 5, wherein the generating comprises:
polling the target device;
receiving a response from the target device; and
constructing the neighbor table based on the response.

7. (Once Amended) The method according to claim 6, wherein:
the polling is performed periodically; and
the method further comprises updating the neighbor table based on the periodic polling.

8. (Once Amended) The method according to claim 6, wherein:
the response comprises a network address of the neighbor; and
the neighbor table indexes the target device to the network address of the neighbor.

9. (Once Amended) The method according to claim 8, wherein the target device:
stores a Management Information Base (MIB) II table containing the network address of the neighbor; and

prepares the response based on the MIB II table.

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Cond. 10. (Once Amended) The method according to claim 2, wherein the target device comprises a router or a switch, and the neighbor comprises a router, a switch, or a computer.

11. (Once Amended) A method of troubleshooting a network that includes a plurality of devices, said method comprising:

receiving information from the plurality of devices;

generating a neighbor table for the network based on the information provided by the plurality of devices; and

attempting to communicate with a target device among the plurality of devices to determine if the target device is active;

wherein, if the target device is determined to be not active, the method further comprises:

using the neighbor table to identify a neighbor of the target device;

attempting to communicate with the identified neighbor to determine if the identified neighbor is active; and

if the identified neighbor is determined to be active, identifying the target device as a failed device.

12. (Once Amended) An apparatus for troubleshooting a network that includes a plurality of devices, said apparatus comprising:

a host computer including a processor; and

a memory which stores executable code which when executed by said processor causes said host computer to (i) attempt to communicate with a target device among the plurality of devices, (ii) if the attempt to communicate with the target device fails, determine if the target device has an active neighbor, and (iii) if the target device is determined to have an active neighbor, identify the target device as a failed device.

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13. (Once Amended) The apparatus according to claim 12, wherein the processor attempts to communicate with the target device by sending a packet to the target device and waiting for a response from the target device.

14. (Once Amended) The apparatus according to claim 12, wherein:
the processor determines if the target device has an active neighbor by attempting to communicate with a neighbor of the target device; and
the neighbor is determined to be active if the attempt to communicate is successful.

15. (Once Amended) The apparatus according to claim 12, wherein the processor executes code to locate a neighbor of the target device.

16. (Once Amended) The apparatus according to claim 15, wherein the processor locates the neighbor by:
generating a neighbor table for the network; and
consulting the neighbor table.

17. (Once Amended) The apparatus according to claim 16, wherein the processor generates the neighbor table by:
polling the target device;
receiving a response from the target device; and
constructing the neighbor table based on the response.

18. (Once Amended) The apparatus according to claim 17, wherein the processor performs the polling periodically and updates the neighbor table based on the periodic polling.

19. (Once Amended) The apparatus according to claim 17, wherein:
the response comprises a network address of the neighbor; and
the neighbor table indexes the target device to the network address of the neighbor.

20. (Once Amended) The apparatus according to claim 12, wherein the target device comprises a router or a switch, and the neighbor comprises a router or a switch.

21. (Once Amended) A computer program stored in a computer-readable medium, said program for troubleshooting a network that includes a plurality of devices, said program comprising:

code for attempting to communicate with a target device among the plurality of devices;
code for determining if the target device has an active neighbor if an attempted communication with the target device fails; and

code for identifying the target device as a failed device if the target device has an active neighbor.

22. (Once Amended) The computer program according to claim 21, wherein the attempting code sends a packet to the target device and waits for a response from the target device.

23. (Once Amended) The computer program according to claim 21, wherein:
the determining code attempts to communicate with a neighbor of the target device; and
the neighbor is determined to be active if an attempted communication is successful.

24. (Once Amended) The computer program according to claim 21, further comprising code to locate a neighbor of the target device.

25. (Once Amended) The computer program according to claim 24, wherein the locating code comprises:

code to generate a neighbor table for the network; and
code to consult the neighbor table to locate the neighbor of the target device.

26. (Once Amended) The computer program according to claim 25, wherein the generating code comprises:

code to poll the target device;

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code to receive a response from the target device; and
code to construct the neighbor table based on the response.

27. (Once Amended) The computer program according to claim 26, wherein:
the polling code performs the polling performed periodically; and
the computer program further comprises code to update the neighbor table based on the
periodic polling.

28. (Once Amended) The computer program according to claim 26, wherein:
the response comprises a network address of the neighbor; and
the neighbor table indexes the target device to the network address of the neighbor.

29. (Once Amended) The computer program according to claim 21, wherein the target
device comprises a router or a switch, and the neighbor comprises a router or a switch.

30. (Once Amended) A network system comprising:
a first device;
a second device; and
a third device located in a path between the first device and the second device on a network;
wherein the first device comprises:

a computer including a processor; and
a memory which stores executable code which when executed by said processor
causes said computer to (i) send a packet to the second device to determine if the second
device is active, (ii) if the second device is not active, send a packet to the third device to
determine if the third device is active, and (iii) if the third device is determined to be active,
identify the second device as a failed device.

31. (Once Amended) The network system according to claim 30, wherein the first device
comprises a computer, the second device comprises a switch or a router, and the third device
comprises a switch or a router.